REPUBLIC OF PORTUGAL - SPECIAL REQUIREMENTS

(October 18, 1994)

1.0 INTRODUCTION

1.1. This document specifies the special requirements and conditions to be satisfied for the certification and use in Portugal of aeronautical products of United States origin imported from the United States.

1.2 The aircraft registration and certification is under the responsibility of the Direcção-Geral da Aviação Civil (DGAC); correspondence should be addressed to:

Direcção-Geral da Aviação Civil
Direcção dos Serviços de Aeronaves
Rua B - Edificio 6
Aeroporto de Lisboa
1700 Lisboa
PORTUGAL

Cable Address: AEROCIVIL LISBOA
Telex: 12120 AERCIV P
Fax: 351 1 8473585
Phones: 351 1 8488151 - 8488152 - 8488153 - 8488154

2.0 ELIGIBILITY

2.1 Aircraft or any other Class I products, to be eligible for registration and airworthiness certification by the DGAC, must be eligible for certification in the United States “Standard” and should be covered by Export Certificate of Airworthiness - FAA Form 8130-4
- in accordance with Part 21 of the United States Federal Aviation Regulations and should comply with the requirements contained in paragraphs 3.0 and 4.0.

2.2 Aircraft or other Class I products eligible for certification in the United States “Restricted”, “Limited” or “Experimental” classification, may be exported to the Republic of Portugal, only if a prior and specific approval of DGAC is obtained.

2.3 Class II and Class III products to be eligible for export to the Republic of Portugal must comply with the applicable provisions of Part 21, Subpart L, of United States Federal Aviation Regulations.

3.0 REQUIRED DOCUMENTS AND DATA

3.1 For Type Certification

An application letter for the validation of Type Certificate shall be completed by the United States manufacturer of the concerned aircraft or when applicable by the United States Type Certificate Holder who must prove that he has been duly authorized and he is capable to assume complete responsibility for the product in regard of continuing airworthiness.

The application shall be accompanied by the following documents and data:

3.1.1. Aircraft

3.1.1.1 FAA Type Certificate.

3.1.1.2 The latest issue of the FAA Type Certificate Data Sheet.

3.1.1.3 Compliance check list with the certification basis indicating for each item of the requirements how it was complied (by test, analysis, calculation, design provisions, etc.) and the title and number of the corresponding substantion document (report, drawing, specification, etc.).

3.1.1.4 A copy of the type flight test report. Flight characteristics of the aircraft shall be described in this report in a manner convenient for calculating the performance of the aircraft over a reasonable range of weights, altitudes and atmospheric conditions. Performance figures contained in, or furnished with the type flight test report, must be corrected to standard atmospheric conditions and a statement to this effect shall be made as part of the report. Established operational limitations, speeds and approved loads shall be indicated.

3.1.1.5 A type record of stress analysis summary showing, for all members of the primary structure, their design loads, dimensions, materials, strength and margins of safety, or a copy of the static strength test reports when type approval was granted on the basis of such tests. If the aircraft has been approved for ditching, appropriate substantial data shall be submitted.

3.1.1.6 The set of all FAA Special Conditions, equivalent safety items and exemptions from the airworthiness requirements.

3.1.1.7 Two copies of the FAA Approved Flight Manual.

3.1.1.8 Final definition of Type design.

3.1.1.9 Maintenance Manual Chapter 5.

3.1.1.10 Specification for Cabin Furnishing Equipment and arrangement.

3.1.1.11 Maintenance Review Board.

3.1.1.12 Certification Maintenance Requirements.

3.1.1.13 Aircraft Equipment List.

3.1.1.14 Electrical Load Analysis.

3.1.1.15 If the aircraft is certified in the restricted category:

In addition to the above referred information the following is also required:

A statement by the Federal Aviation Administration describing the manner in which the aircraft has been modified from the “standard category” configuration to make it suitable for “special purpose” operation.

A statement indicating part of the Federal Aviation Regulations, the FAA Aircraft Specifications or Type Certificate Data Sheet under which the aircraft have been eligible for type certification in the "standard category" except for those special proposal modifications accomplished by the manufacturer and which are approved by the Federal Aviation Administration.

3.1.2 For Engine/Propellers Certification

3.1.2.1 FAA Type Certificate.

3.1.2.2 The latest issue of the FAA Type Certificate Data Sheet.

3.1.2.3 Compliance check list with certification basis, indicating for each item of the requirements how it was complied with (by test, analysis, calculation, design provisions, etc.) and title and number of the corresponding substantiation document (report, drawing, specification, etc.).

3.1.2.4 The set of all FAA Special Conditions, equivalent safety items and exemptions for the airworthiness requirements.

3.1.2.5 Operating Manual.

3.1.2.6 Listing of Service Life for critical parts subject to fatigue.

3.2 Certificate of Airworthiness Issuance

3.2.1 Documentation

For the issuance of individual aircraft Certificate of Airworthiness of a particular type or model exported to Portugal, the following documentation must be furnished:

3.2.1.1 Manuals

Flight Manual	2 copies
Operations Manual	2
Master Minimum Equipment List	2
Check List Abnormal Emergency	2
Maintenance Manual	1
Wiring Diagram	1
Weight and Balance Manual	1
Structural Repair	1
Technical Specification	1
Maintenance Planning Document	1
IPC	1
Set of Service Bulletins and Service Letters or equivalent documents	1
Trouble Shooting Manual	1
Tool and Equipment Manual	1
Airplane Characteristics Airport Planning	1
Component Documentation Status	1
Engine Maintenance Manual	1

Engine IPC	1
Set of Engine Service Bulletins and Service Letters or equivalent documents	1
Propellers Maintenance Manual	1
Propellers IPC	1
Set of Propellers Service Bulletins and Service Letters or equivalent documents	1
APU Inspection/Repair Manual	1
APU IPC	1
Set of APU Service Bulletins and Service Letters or equivalent documents	1

Any other documentation when specifically asked for.

A statement by an authorized representative of the manufacturer to the effect that all pertinent information, Service Bulletins and revisions and up-dates for the above specified data, will be automatically distributed to the Directorate-General of Civil Aviation is required.

Microfilme/microfiche documentation is acceptable.
These Manuals are requested for the first airplane of each model only.

3.2.1.2 Aircraft Records

New Aircraft

-Airworthiness Certificate for Export
-Statement of Conformity for Radio Installation
-Individual Noise Certificate
-Certificate of Non-Registration
-Production Aircraft Conformity Certificate
-Aircraft Definition(List of Modifications in addition to the Type Design)
-Compliance statement that all applicable aircraft, engines, propellers and appliances Airworthiness Directives are satisfied
-Weighing Report
-Aircraft Inspection Report containing:
-Acceptance Sheet
-List of constituent assemblies
-Conformity of the aircraft to the modification standard including customer options
-List of Equipment

-List of recordable concessions
-System ground testing
-Interior arrangement drawings
-Engine/Propellers records
-Fuel Quantity Gauging System Check
-One copy of the production flight Test Report
for the aircraft involved, including a copy of the flight Test Check List utilized when the testing the aircraft.
-Time and Cycle Log Aircraft, engine, APU
-APU Records
-Compass Swing Chart

Used Aircraft

In addition to the above referred information the following is also required for used aircraft:

-The maintenance program to which these aircraft have previously been maintained including previous check cycle and future check cycle.
-Component overhaul life summary, including details of remaining service life and modifications standards.
-Component and structure retirement life summary when applicable including details of remaining service life.
-Compliance with structural inspection program.
-This must include details of any structural sampling program in which these aircraft have been included, together with details of their position in this program.
-A complete History of the aircraft, engines, components and equipment, including summary of maintenance, repairs and alterations performed during the aircraft life.
-Details of all changes of major structural components such as wings, tailplanes, helicopter rotor or transmission components and data of the replacing components.
-Details of major structural repairs including the nature of damage in each case.
-For each used aircraft, DGAC will establish on the basis of the maintenance records, and after inspection of the aircraft, the phase in on DGAC approved maintenance schedule that must be followed and the additional maintenance to be performed if necessary.

3.2.2 Training Courses

It is required by this Directorate General of Civil Aviation that their Inspectors attend the following manufacturer's training courses:

-Airframe and Power Plant	2
-Engine Maintenance Courses	2
-Avionics Course	1
-Pilot's Course	2

-These courses are requested for the first Airplane of each model only.

3.3 Appliances - General

For the purpose of this procedure, "appliance" has the meaning assigned to it in FAR Part 1 and includes associated replacement parts.
The DGAC will accept that an appliance has those characteristics vouched for or a FAA Airworthiness Approval TAG (FAA Form 8130-3). The following procedures provide acceptable alternative means of compliance for appliances other than radio navigation equipment:

The appliance has been accepted by the FAA as complying with the applicable Technical Standard Order or,

The appliance has been accepted by the FAA as meeting the applicable FAR's and the terms of applicant's specifications.

An FAA Airworthiness Approval Tag must be supplied with all appliances. The provisions of this paragraph are not applicable to standard parts (such as nuts and bolts) conforming to established industry or government specifications, e.g. Standard Aircraft Equipment (SAE), and Military Specifications (MIL.Spec.).

In all instances, suppliers must certify on the face of their invoice, that the product involved was manufactured under one or more of the preceeding procedures: i.e., FAA PC N°._; FAA-APIS letter dated _; FAA-PMA letter dated _; TSO N°._; MIL Spec. _; other Government or Industry Specifications _.

3.4 Radio Equipment

Radio equipment must be approved by FAA and comply with TSO/FAA TC specifications. When a radio equipment is exported to Portugal for the first time, one copy of the following material shall be furnished:

-FCC Grant of Certification.

-The manufacturer's statement of conformance submitted to FAA.

-The letter of acceptance issued by FAA.

-The technical manuals and bulletins (Service Bulletins, etc.).

-A FAA Airworthiness Approval Tag must be supplied with the equipment.

4.0 SPECIAL TECHNICAL REQUIREMENTS

4.1 Noise Limits

An aircraft will be eligible for Type Certification only if it complies with the noise standards of ICAO Annex 16, Volume I, Second edition (1988). The following material shall be furnished in addition to the referred in paragraph 3.1.

4.1.1 Certified maximum noise levels and their 90 percent confidence limits in accordance with the applicable chapters and appendix of the ICAO, Annex 16, Volume I, second edition (1988).

4.1.2 Description of noise measuring and analyzing procedures including correction methods which should include the following items:

A measured and corrected sound pressure levels presented in one-third octave band levels obtained with equipment conforming to the standards described in applicable chapters of the ICAO Annex 16, second edition.

The type of equipment used for measurement and analysis of all acoustic aeroplane performance and meteorological data.

4.1.3 The following atmospheric environmental data, measured immediately before, after or during each test at observation points prescribed in applicable chapters and appendices of the ICAO, Annex 16, second edition:

Air temperature and relative humidity.
Maximum, minimum and average wind velocities.
Atmospheric pressure.

4.1.4 Comments of local topography, ground cover and other events that might interfere with sound recordings.

4.1.5 The following aeroplane information:

Type, model and serial number (if any) of the aeroplane and engines.

Gross dimensions of the aeroplane and location of engines.

Aeroplane gross weight for each test run.

Aeroplane configuration such as flap and landing gear positions.

Airspeed in knots.

Engine performance in terms of net thrust, engine pressure ratios jet exhaust temperatures and fan or compressor shaft rotational speeds as determined from aeroplane instruments and manufacturer's data.

Aeroplane height above ground determined by a method independent of cockpit instrumentation such as radar tracking, theodolite triangulation or photographic scaling techniques approved by the certification authorities.

4.1.6 Aeroplane speed and position and engine performance parameters recorded at an approved sampling rate sufficient to correct to the noise certification reference conditions and synchronized with the noise measurement.

4.1.7 Lateral position relative to the extended center line of the runway, configuration and gross weight.

4.1.8 Description of such noise measuring and analyzing procedures including correction methods that differ from or are not specified in the ICAO, Annex 16, Volume I, second edition (1988), (if any).

4.1.9 Description and analysis of the sources of possible errors which may exist in the final values of EPNL.

4.1.10 Statement of any additional modification incorporated for the purpose of compliance with the applicable noise certification standards.

4.2 Radio Communication and Navigation Equipment

VHF radio-communication equipment must be compatible for use with 25 khz spacing between channels.
VHF radio-navigation equipment must be compatible for use with 50 khz spacing between VOR and LOC channels and 150 khz between associated glide slope channels.
Communication and navigation antennas are to be distinct. VOR/LOC and glide slope antennas are to be distinct.

4.3 Flight Instruments

Air speed indicators must show airspeed in knots only.
Altimeters must be of the sensitive type showing altitude in feet with adjustable setting in millibar (hPa) scale.

4.4 Safety Placards

All cabin safety placards and location placards of safety equipment must be bilingual (Portuguese and English) or pictograms.

4.5 Emergency Exits

4.5.1 The indicating marks for all Type II and larger passenger emergency exits unlocking handle motions should conform the general shapes and dimensions indicated in JAR25 ACJ 25.811 (e)(4).

4.5.2 The access to emergency exits Type III and IV shall comply at least with identical requirements of U.K. CAA Airworthiness Notice N°. 79, Issue 3. DGAC may authorize deviations from the requirements in configurations involving two adjacent exits of each side of the fuselage. Alternative measures such as the positioning of a cabin crew member in the overwing exit area are acceptable as long as they lead to an equivalent safety standard.

4.6 Registration Marks

The registration marks shall be affixed in accordance with ICAO Annex 7.

4.7 Records

For transport category the installation of a Flight Data Record and Cockpit Voice Record is required, according to ICAO Annex 6, Part I.

4.8 Ground Proximity Warning System

For transport category the installation of GPWS is required, according to ICAO Annex 6, Part I.

4.9 Oxygen and Protective Breathing Equipment

For transport category the installation of Protective Breathing Equipment, supplemental oxygen and therapeutic oxygen is required, according to ECAC REMSA/6-WP/2, Appendix 1 (Updating of ECAC Doc.18).

4.10 Emergency and Safety Equipment

For transport category the installation of the emergency and safety equipment is required, according to ECAC Doc.18 (Joint Requirements for Emergency and Safety Airborne Equipment Training and Procedures).

4.11 S.S.R. Mode “S”

Installation of S.S.R. mode “S” is required, according to ICAO Annex 10.

4.12 Cabin Interior’s Layout

For transport category cabin interior’s layout of each aircraft must be approved by D.G.A.C.

4.13 AFAA and MMEL

For transport category AFAA and MMEL previous approvals are required.

4.14 Operations in MNPS Airspace

The installation of navigation equipment that complies with minimum navigation specifications prescribed in ICAO Doc. 7030, in the form of Regional Supplementary Procedures is required for operations in MNPS Airspace.

4.15 ETOP's

Etop's requirements according to FAA AC 120-42A.

5.0 EXPORT - FLYAWAY AIRCRAFT

An aircraft being exported to Portugal via flyaway, without U.S. nationality and registration marks, should display Portuguese nationality and registration marks and should carry the following documents on the delivery flight:

Special Flight Permit for the delivery flight.

U.S. Certificate of Airworthiness for Export-FAA Form 8130-4.

FAA Approved Flight Manual.

Portuguese Radio License or a letter of authority to cover the use of radio, valid for the delivery flight, for the radio equipment installed on the aircraft.

Such other documents as may be essential for the safe operation of the aircraft.

The aircraft will be subject to a physical condition survey and review of the associated records to the satisfaction of the DGAC before the issue of a special Flight Permit is considered. It will be the responsibility of the Portuguese operator to ensure that the necessary flight documents are installed and carried in the aircraft during the delivery flight.